IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) are set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 22 and 23 and ADD new claims 24 and 25 in accordance with the following:

1. (CANCELLED)

2. (CANCELLED)

3. (PREVIOUSLY PRESENTED) A communication method for a radio LAN system providing communication at a first transmission rate, said method comprising:

(a) time-divisionally distributing a first signal of said first transmission rate into n-1 second signals (n = 3, 4, ...);

(b) respectively converting said n-1 second signals into n-1 third signals of a second transmission rate less than said first transmission rate; and

(c) transmitting said n-1 third signals of said second transmission rate through radio transmission paths between n-1 radio base stations and a terminal station connected to at least one terminal unit, wherein said radio LAN system further comprises at least one redundant radio base station n;

(d) transmitting a fourth signal through a radio transmission path between said terminal station and said at least one redundant radio base station n, data of said fourth signal having a given relationship with data in signals transmitted between at least k (k5(n-1)) radio base stations of said n-1 radio base stations and said terminal station; and

(e) compensating, when at least one transmission path between said at least k radio base stations and said terminal station is interrupted, data of the signal to be transmitted

through an interrupted transmission path based on said data of said fourth signal transmitted between said at least one redundant radio base station n and said terminal station.

4. (PREVIOUSLY PRESENTED) A communication method for a radio LAN system providing communication at a first transmission rate, said method comprising:

(a) time-divisionally distributing a first signal of said first transmission rate into n-1 second signals (n = 3, 4, ...);

(b) respectively converting said n-1 second signals into n-1 third signals of a second transmission rate less than said first transmission rate; and

(c) transmitting said n-1 third signals of said second transmission rate through radio transmission paths between n-1 radio base stations and a terminal station connected to at least one terminal unit, wherein said radio LAN system further comprises at least one redundant radio base station n;

(d) transmitting a fourth signal through a radio transmission path between said terminal station and said at least one redundant radio base station n, data of said fourth signal having a given relationship with data in signals transmitted between at least k (k5(n-1)) radio base stations of said n-1 radio base stations and said terminal station; and

(e) compensating, when at least one transmission path between said at least k radio base stations and said terminal station is interrupted, data of the signal to be transmitted through an interrupted transmission path based on said data of said fourth signal transmitted between said at least one redundant radio base station n and said terminal station, wherein said given relationship in said step (d) is that said data of said fourth signal transmitted between said at least one redundant radio base station n and said terminal station is a summation of data of the signals transmitted between said at least k radio base stations and said terminal station for each given time slot.

5. (PREVIOUSLY PRESENTED) A communication method for a radio LAN system providing communication at a first transmission rate, said method comprising:

(a) time-divisionally distributing a first signal of said first transmission rate into n-1 second signals (n = 3, 4, ...);

(b) respectively converting said n-1 second signals into n-1 third signals of a second transmission rate less than said first transmission rate; and

(c) transmitting said n-1 third signals of said second transmission rate through radio transmission paths between n-1 radio base stations and a terminal station connected to at least one terminal unit, wherein said radio LAN system further comprises at least one redundant radio base station n;

(d) monitoring interruption of transmission paths between said n-1 radio base stations and said terminal station; and

(e) compensating, when one of said transmission paths is interrupted, data of an interrupted transmission path by transmitting said data of the interrupted transmission path between said at least one redundant radio base station n and said terminal station.

6. (CANCELLED)

7. (CANCELLED)

8. (PREVIOUSLY PRESENTED) A communication apparatus for a radio LAN system providing communication at a first transmission rate, said apparatus comprising:

rate-conversion-and-distribution means for time-divisionally distributing a first signal of said first transmission rate into n-1 second signals (n = 3, 4, ...) and respectively converting said n-1 second signals into n-1 third signals of a second transmission rate less than said first transmission rate;

n-1 radio base stations transmitting said n-1 third signals of said second transmission rate to a terminal station connected to at least one terminal unit through radio transmission paths;

at least one summation means for generating a fourth signal by summing data of at least k (k#(n-1)) signals of said n-1 third signals of said second transmission rate every timeslots; and

at least one redundant radio base station n transmitting said fourth signal generated in said at least one summation means to said terminal station.

9. (PREVIOUSLY PRESENTED) A communication apparatus for a radio LAN system providing communication at a first transmission rate, said apparatus comprising:

rate-conversion-and-distribution means for time-divisionally distributing a first signal of said first transmission rate into n-1 second signals (n = 3, 4, ...) and respectively converting said n-1 second signals into n-1 third signals of a second transmission rate less than said first transmission rate;

n-1 radio base stations transmitting said n-1 third signals of said second transmission rate to a terminal station connected to at least one terminal unit through radio transmission paths;

at least one redundant radio base station n transmitting a signal to said terminal station;

line monitoring means for monitoring interruption of transmission paths between said n-1 radio base stations and said terminal station; and

switching means, when at least one of said transmission paths is interrupted, for forwarding a signal to be transmitted through an interrupted transmission path to said at least one redundant radio base station n.

10. (CANCELLED)

11. (ORIGINAL) A terminal station used in a radio LAN system having rate-conversion-and-distribution means for time-divisionally distributing a first signal of a first transmission rate into n-1 second signals (n = 3, 4, ...) and respectively converting said n-1 second signals into n-1 third signals of a second transmission rate less than said first transmission rate, n-1l radio base stations transmitting said n-1 third signals of said second transmission rate to said terminal station connected to at least one terminal unit through radio transmission paths, at least one first summation means for generating a fourth signal by summing data of at least k (k#(n-1)) signals of said n-1 third signals of said second transmission rate for every timeslot, and at least one redundant radio base station n transmitting said fourth signal generated in said at least one first summation means to said terminal station, said terminal station comprising:

a receiver receiving said third signals of said second transmission rate transmitted from said n-1 radio base stations;

rate-conversion-and-multiplex means for converting and multiplexing received third signals of said second transmission rate into signals of said first transmission rate;

line monitoring means for monitoring interruption of transmission paths between said n-1 radio base stations and said terminal station;

at least one second summation means, when at least one of said transmission paths is interrupted, for generating a fifth signal by summing data of every timeslots of at least k signals of signals transmitted from said n-1 radio base stations except for a signal to be transmitted through an interrupted transmission path;

at least one subtraction means for generating subtraction data between data of the signal transmitted from said redundant radio base station n and data of said fifth signal generated in said second summation means; and

switching means for providing said subtraction data generated in said subtraction means to said rate-conversion-and-multiplex means instead of providing data of an interrupted signal detected in said monitoring means; wherein even when at least one of signals transmitted from said n-1 radio base stations is interrupted, data of the interrupted signal is compensated.

12. (PREVIOUSLY PRESENTED) A terminal station used in a radio LAN system having rate-conversion-and-distribution means for time-divisionally distributing a first signal of a first transmission rate into n-1 second signals (n = 3, 4, ...) and respectively converting said n-1 second signals into n-1 third signals of a second transmission rate less than said first transmission rate, n-1 radio base stations transmitting said n-1 third signals of the second transmission rate to said terminal station connected to at least one terminal unit through radio transmission paths, at least one redundant radio base station n transmitting a signal to said terminal station, first line monitoring means for monitoring interruption of transmission paths between said n-1 radio base stations and said terminal station, and first switching means, when at least one of said transmission paths is interrupted, for forwarding a signal to be transmitted through an interrupted transmission path to said at least one redundant radio base station n; said terminal station comprising:

a receiver receiving said third signals of the second transmission rate transmitted from said n-1 radio base stations;

rate-conversion-and-multiplex means for converting and multiplexing received third signals of the second transmission rate into signals of said first transmission rate;

second line monitoring means for monitoring interruption of transmission paths between said n-1 radio base stations and said terminal station; and

second switching means, when at least one of said transmission paths is interrupted, for providing the signal transmitted from said redundant radio base station to said rate-conversion-

and-multiplex means instead of providing a signal to be transmitted through an interrupted transmission path;

wherein even when at least one of signals transmitted from said n-1 radio base stations is interrupted, data of the interrupted signal is compensated.

Claims 13-21 (CANCELLED)

22. (CURRENTLY AMENDED) A communication method for a radio LAN system, comprising:

receiving a first slot having first signals for a first terminal and a second slot having second signals for a second terminal~~an input signal obtained by time-multiplexing a plurality of signals to be sent to a plurality of terminals;~~

~~determining a terminal-unit signal to be sent to a corresponding terminal for each of a plurality of time slots of the input signal~~;

~~time-divisionally~~ dividing said first signals of said first slot into at least a first part and a second part ~~each terminal-unit signal into first N signals within a corresponding time slot~~;

converting said first part into a first converted part having a lower transmitting rate than that of said first part ~~the first N signals into second N signals having a transmission rate lower than that of the first N signals~~;

converting said second part into a second converted part having a lower transmitting rate than that of said second part; and

transmitting said first converted part from a first base station to said terminal and transmitting said second converted part from a second base station to said terminal, wherein said first base station and said second base station simultaneously transmit signals belonging to said first signals for said first terminal.

~~providing the second N signals separately to a plurality of base stations; and~~

~~converting each of the second N signals into a plurality of radio signals and transmitting each of the plurality of radio signals from an antenna of each of the base stations to respective terminals.~~

23. (CURRENTLY AMENDED) An apparatus for a radio LAN system, comprising:

a receiving unit receiving a first slot having first signals for a first terminal and a second slot having second signals for a second terminal~~a first unit receiving an input signal obtained by time-multiplexing a plurality of signals to be sent to a plurality of terminals~~;

~~a second unit determining a terminal unit signal to be sent to a corresponding terminal for each of a plurality of time slots of the input signal;~~

a dividing unit dividing said first signals of said first slot into at least a first part and a second part~~a third unit time-divisionally dividing each terminal unit signal into first N signals within a corresponding time slot~~;

a converting unit converting said first part into a first converted part having a lower transmitting rate than that of said first part, and converting said second part into a second converted part having a lower transmitting rate than that of said second part; and~~a fourth unit converting the first N signals into second N signals having a transmission rate lower than that of the first N signals;~~

a transmitting unit transmitting said first converted part from a first base station to said terminal and transmitting said second converted part from a second base station to said terminal, wherein said first base station and said second base station simultaneously transmit signals belonging to said first signals for said first terminal.~~a fifth unit providing the second N signals separately to a plurality of base stations; and~~

~~a sixth unit converting each of the second N signals into a plurality of radio signals and transmitting each of the plurality of radio signals from an antenna of each of the base stations to respective terminals.~~

24. (NEW) A communication method for a radio LAN system having n-1 (n = 3, 4, ...) base stations, comprising:

receiving a time-multiplexed input signal having a plurality of original data components, each original data component to be sent to a different terminal and occupying a single time slot;

dividing each original data component into n-1 sub-components, each of the sub-components containing a different and smaller portion of the respective original data component;

converting each of the sub-components into n-1 converted sub-components having a lower transmitting rate than that of the respective sub-components; and

transmitting each of the n-1 converted sub-components of each original data component from a different one of the n-1 base stations to a corresponding terminal, wherein the n-1 base stations, respectively transmitting the n-1 converted sub-components, simultaneously transmit signals belonging to a specific one of the original data components for a corresponding terminal of the specific one of the original data components.

25. (NEW) An apparatus for a radio LAN system having n-1 (n = 3, 4, ...) base stations, comprising:

a receiving unit receiving a time-multiplexed input signal having a plurality of original data components, each original data component to be sent to a different terminal and occupying a single time slot;

a dividing unit dividing each original data component into n-1 sub-components, each of the sub-components containing a different and smaller portion of the respective original data component;

a converting unit converting each of the sub-components into n-1 converted sub-components having a lower transmitting rate than that of the respective sub-components; and

a transmitting unit transmitting each of the n-1 converted sub-components of each original data component from a different one of the n-1 base stations to a corresponding terminal, wherein the n-1 base stations, respectively transmitting the n-1 converted sub-components, simultaneously transmit signals belonging to a specific one of the original data components for a corresponding terminal of the specific one of the original data components.